**CLAIMS**

1. A barrier for an access gate, permitting or restricting a user to enter an area or space, the barrier comprising:

a metal base frame;

a motor assembly mounted on the metal base frame, wherein the motor assembly includes an electric motor and a gear assembly, the motor assembly having an integrated control unit for controlling the electric motor;

a barrier flap with a wing-like shape flap pivotally mounted on the metal base frame at a lower end, wherein the barrier flap is operationally actuated by the motor assembly to pivot about the lower end along a horizontal axis between the opened and closed positions, the barrier flap is connected to the motor assembly through a primary bar and a secondary bar in a multi-bar linkage; and

a guiding support extended from the metal base frame upwardly towards an upper end of the barrier flap and engaging it thereto, the guiding support having a guide rail for supporting and guiding the upper end of the barrier flap along the horizontal axis,

wherein the primary bar is directly driven by the motor assembly at one end and the secondary bar is connected between the primary bar and the barrier flap.

2. The barrier according to claim 1, wherein the electric motor is a brushless DC motor.

3. The barrier according to claim 1, wherein the electric motor is a brushed DC motor or a brushless AC motor.

4. The barrier according to claim 1, wherein the multi-bar linkage is a four-bar linkage.

5. The barrier according to claim 1, wherein the barrier flap is a telescopic structure having an outer shell and at least one inner core flap, the outer shell and the inner core flap are individually supported by a respective tertiary bar, and each respective tertiary bar is pivoted on the metal base frame.

6. The barrier according to claim 5, wherein the two tertiary bar supporting the outer shell and the inner core flap are pivoted on a same pivot joint.

7. The barrier according to claim 5, wherein each of the tertiary bar is connected to the primary bar via a respective secondary bar.

8. The barrier according to claim 5, wherein the tertiary bar connected to the inner core flap is adapted to move faster than the outer shell.

9. The barrier according to claim 8, wherein the tertiary bar connected to the inner core flap is adapted to move differentially in accordance with its stroke length.

10. The barrier according to claim 1, further comprises at least one stopper for limiting rotation of the primary bar to a predefined curvature.

11. The barrier according to claim 1, further comprises a resilient member, wherein the resilient member provides a returning force against the barrier flap when the barrier is in its closed position.

12. The barrier according to claim 1, wherein the motor assembly is oriented perpendicularly on the metal base frame.

13. The barrier according to claim 1, wherein the gear assembly further comprises a planetary gear and a bevel gear.

14. The barrier according to claim 13, wherein the planetary gear provides stability and even distribution of the load from the electric motor.

15. The barrier according to claim 13, wherein the bevel gear further comprises a miter gear, adapted to change a driving direction at 90° or right angle, angularly driving the flap lever joint.

16. The barrier according to claim 1, wherein the motor assembly is configured to drive the primary bar to actuate the barrier flap bidirectional only.

17. The barrier according to claim 16, wherein the integrated control unit is configured to detect if there is an obstruction against the barrier flap.

18. The barrier according to claim 17, wherein the barrier flap is retracted immediately when the obstruction is detected.

19. An access gate comprising a barrier in accordance with any one of the preceding claims.

20. An access gate comprising a pair of opposing configured barrier in accordance with any one of the claims 1-13.

1. An access gate for permitting or restricting passage to an area, the access gate comprising:

a base frame;

a motor gear assembly including an electric motor, a gear connected to the electric motor and a control unit for operating bidirectional rotation of the electric motor, with the motor gear assembly being mounted on the base frame;

a barrier flap (102, 408) having a curved edge and a substantially convergent corner opposite the curved edge, so that the barrier flap is rotatable substantially perpendicular to the passage controlled by the access gate about a flap pivot axis (103, 308, 404, 612) located near the convergent corner and the base frame;

a two-connection crank lever (105, 302, 405, 602) having first and second pivot axes orientated perpendicular to the crank lever, with the first pivot axis being connected to an output of the motor gear assembly, the second pivot axis being connected to the barrier flap via a linkage bar (104, 303, 406, 603) and crank radius of the second pivot axis from the first pivot axis is smaller than the length of the linkage bar (104, 303, 406, 603); and

a guide rail for supporting and cooperating with the barrier flap as the barrier flap is oscillated about the flap pivot axis, so that the barrier flap is in a close position to

restrict passage through the access gate or is in the open position to permit passage through the access gate.

2. The access gate according to claim 1, further comprising a support bar (110, 304, 605) connecting the barrier flap to the flap pivot axis.

3. The access gate according to claim 2, further comprising an inner core flap (409) that is receivable inside the barrier flap, with the inner core flap being connected by an associated support bar (606) to the flap pivot axis and by an associated linkage bar (604) to the second pivot axis of the crank lever, so that the two linkage bars (603, 604) to the barrier flap and inner core flap share a common pivot axis (at the second pivot axis of the crank lever).

4. The access gate according to claim 3, wherein the linkage bar (604) associated with the inner core flap is longer than the linkage bar (603) associated with the barrier flap, so that rotation of the inner core flap is faster than rotation of the barrier flap in both directions.

5. The access gate according to claim 4, wherein the linkage bars are adjustable in lengths.

6. The access gate according to any one of the preceding claims, wherein output of the gear is perpendicular to output of the electric motor, so that the electric motor is assembled in an upright position for a smaller footprint of the base frame.

7. The access gate according to any one of the preceding claims, further comprising two stoppers for limiting each associated end position of the crank lever.

8. The access gate according to any one of the preceding claims, further comprising a resilient member connecting the crank lever to the base frame to bias the barrier flap to open, to allow passage through the access gate.

**102** and the other end connected to the flap lever joint **105**. The adjustable bar **104** is adjustable in length for controlling the stroke length of the barrier flap **102**. The metal bar **110** is pivoted to the bearing support **103** at one lower distal end and is supported at the upper distal end by the guiding support **107**, wherein the upper distal end swivels along the guiding support **107**. The flap lever joint **105** is substantially a L-shaped connector with the angled corner attaching to the motor assembly **101**. The motor assembly **110** drives the flap lever joint **105** to operationally rotate about the angled corner in both clockwise and anti-clockwise directions. The other distal end of the flap level joint **105** is pivotally connected to the adjustable bar **104** as mentioned above. The other end of the flap level joint **105** that is extended out from the angled corner serves as a stopper arm to limit the rotations of the flap level joint **105**. The adjustable bar **104**, the flap lever joint **105** and the metal bar **110** together with the metal base frame **108** that supports the metal bar **110** and the flap lever joint **105** are connected one to another in a loop to forms a four-bar linkage, which will be further described below in details. The guiding support **107** guides the stroke of the opening or closing movement of the barrier flap **102** in the barrier **100**.

**[0031]** The barrier flap **102** pivots about the bearing support **103** only in the to and fro or bidirectional movement between the barrier's **100** opened and closed positions. The resilient member has one end attached to the metal bar **110** and another end attached to the base frame **108**. It extends when the barrier flap **102** is in its closed position on the barrier **100**. But it pulls back the barrier flap **102** to the opened position when the motor assembly **101** looses power to drive the barrier flap **102** back. Further, the type of barrier flap **102** in the present invention is a wing-like shape flap with its